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10/740,200	12/18/2003	Charles R. Obranovich	SYS-P-1230 (8364-90585)	2226

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Patent Services Group
Honeywell International, Inc.
101 Colubia Road
P. O. Box 2245
Morristown, NJ 07962

EXAMINER	
PAUL, DISLER	
ART UNIT	**PAPER NUMBER**
2615	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/740,200	OBRANOVICH ET AL.	
	Examiner	Art Unit	
	Disler Paul	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-28;32 and 35-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-28,32 and 35-39* is/are rejected.

7)☒ Claim(s) ● is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/21/04; 5/31/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed May, 22,07 have been fully considered but they are not persuasive. With respect to the added limitation for claims 32, the examiner believed such added limitation is unpatentable over Kimura et al. (US 2003/0128850 A1).

Furthermore, the examiner has read the claims as broadly as possible in regard to the intelligible audio output, the examiner has read the SNR as such.

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Claim Rejections - 35 USC § 112

3. Claim 11 recites the limitation "the second speech" in test. There is insufficient antecedent basis for this limitation in the claim.

For prior art reference, the examiner will read the claim as evaluating the intelligibility of the speech intelligibility test signal.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2-20; 22-25; 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finn et al.("US 2002/0141601 A1") and Faltesek et al.("US 2005/0105743 A1").

Re claim 2, Finn et al. disclosed a system comprising: a plurality of fixedly mountable microphones ("*fig.10/(508,552,554,556); page 10[0074] line 1-2*"); and circuits coupled to respective microphones including circuitry for evaluating intelligibility of audio received by the respective microphones

("*fig.10/(570,572,574,576)-to analyzed the intelligibility of the respective microphones and page 10[0074] line 5-8*") and generating an indicator of intelligibility on a per microphone basis, the circuits each include a network output port ("*fig.10/(580,582,584,586)-output indicator for each respective intelligibility analyzed microphones/ which is in itself the output port being outputted at (578)*"). However, Finn et al. fail to disclose the system being included a plurality of ambient condition detectors with at least some of microphones carried by respective ones of the detectors. But, Faltesek et al. discloses a system with audio feedback from a region being monitored which included a plurality of ambient condition detectors with at least some of microphones carried by respective ones of the detectors("*fig.1-2;page 2[0037] line 7-8;page2[0040] line 1-3*") for the purpose of feeding fire sounds as well as temperature information to a displaced site for processing. Thus taking he combined teaching of Finn et al. and Faltesek et al. as a whole, it would have been obvious for one of ordinary skill in the art to modify the teaching of Faltesek et al. by incorporating the plurality of ambient condition detectors with at least some of microphones carried by respective ones of the detectors for the purpose of feeding fire sounds as well as temperature information to a displaced site for processing.

Re claim 3, a system as in claim 2 where at least some of the circuits are carried by respective ones of the detectors coupled to

respective microphones also carried by the same detector ("*Faltesek, fig.1-detector(20) with (16) enable to carry the microphones (14)*").

Re claim 4, Finn et al. disclosed a system comprising: a plurality of fixedly mountable microphones ("*fig.10/(508,552,554,556); page 10[0074] line 1-2*"); and circuits coupled to respective microphones including circuitry for evaluating intelligibility of audio received by the respective microphones ("*fig.10/(570,572,574,576)-to analyzed the intelligibility of the respective microphones and page 10[0074] line 5-8*") and generating an indicator of intelligibility on a per microphone basis, the circuits each include a network output port ("*fig.10/(580,582,584,586)-output indicator for each respective intelligibility analyzed microphones/ which is in itself the output port being outputted at (578)*"), and circuitry that produces speech intelligibility test signals and include audio output device which will audibly produce the speech intelligibility test signals which will be received by the microphones ("*Finn,fig.10-the device speaker output of (514)-to be pick up by the microphones at fig.9/(512)respectively for speech intelligibility & page 2[0025]/(32,36)*").

Re claim 5, a system as in claim 4, which includes control circuits coupled to the microphones and the audio output device, the

control circuits couple electrical representations of the speech intelligibility test signals to the output device ("*Finn,fig.10/(578);page 10[0076] line 8-10*").

Re claim 6, a system as in claim 5 which includes a plurality of audio output devices coupled to the control circuits ("*Finn,fig./10-with the plurality of output devices (514,558,560")*.

Re claim 7, has been analyzed and rejected with respect to claim 1 above.

Re claim 8, a system as in claim 7 where at least some of the detectors carry respective ones of the microphones ("*Faltesek, fig.1-detector(20) with (16) enable to carry the microphones (14)*").

Re claim 9,Finn et al. disclosed a system comprising: a plurality of fixedly mountable microphones ("*fig.10/(508,552,554,556); page 10[0074] line 1-2*"); and circuits coupled to respective microphones including circuitry for evaluating intelligibility of audio received by the respective microphones ("*fig.10/(570,572,574,576)-to analyzed the intelligibility of the respective microphones and page 10[0074] line 5-8*") and generating an indicator of intelligibility on a per microphone basis, the circuits each include a network output port

(*"fig.10/(580,582,584,586)-output indicator for each respective intelligibility analyzed microphones/ which is in itself the output port being outputted at (578)"*). however, Finn et al. fail to teach the control circuits include at least one of logic or executable instructions for producing speech intelligibility test signals to be audibly output by the at least one audio output device. But, Faltesek et al. teach the system with audio feedback in which the control circuits include at least one of logic or executable instructions for producing speech intelligibility test signals to be audibly output by the at least one audio output device (*"fig.2-control circuits(32) to be outputted at (34) and page 3[0041] line 4-7;page 3[0046] line 5-9"*) for the purpose of coupling/linking the circuitry to the output device. Thus taking the combined teaching of Finn et al. and Faltesek et al. as a whole, it would have been obvious for one of ordinary skill in the art to modify the former modified teaching of Finn et al. and Faltesek et al. as a whole, by incorporating the the control circuits include at least one of logic or executable instructions for producing speech intelligibility test signals to be audibly output by the at least one audio output device for the purpose of coupling/linking the circuitry to the output device.

Re claim 10, a system as in claim 9 which includes additional logic or executable instructions for processing the speech intelligibility test signals received from the respective

microphones("*Faltesek, page 3[0046] line 3-6- additional stored speech could be executed by circuits*").

Re claim 11, a method comprising: generating providing at least one machine generated at least one speech intelligibility test signal("*fig.10/(514-558)-to generate speech intelligibility, fig.1 (32,34)-a machine in this case speaker)*"); sensing the speech intelligibility test signal at least one fixed location ("*fig.10/(508,552,556)-so to sense the speech intelligibility; fig.1 (36,38)*"); evaluating the intelligibility of the speech intelligibility test signal("*fig.10/(570-576) to evaluate the speech intelligibility, fig.1 (40)*").

Re claim 12, a method as in claim 11, which includes generating a plurality of speech intelligibility test signal("*fig.10/514,558,560*").

Re claim 13, a method as in claim 11 which includes sensing the speech intelligibility test signal at a plurality of spaced apart, fixed locations ("*fig.10/(508,552,554)*").

Re claim 14, a method as in claim 13 which includes: transmitting the sensed speech intelligibility test signal from the plurality of locations to a common site and then processing same to evaluate intelligibility thereof ("*fig.10/ all the many sensed speech pick at (508,556) is analyzed((570-576) and sent to (578)*").

Re claim 15, a method as in claim 14, However, Finn et al. fail to disclose the processing at the common site includes visually presenting processing results. But, Faltesek et al. discloses a system with audio feedback from a region being monitored in which the processing at the common site includes visually presenting processing results ("*fig.2, process info at(32) to be visually present at (34)*") for the purpose of better understanding the on-going, developing, fire-condition where individuals in need of rescue may be found. Thus taking the combined teaching of Finn et al. and Faltesek et al. as a whole, it would have been obvious for one of ordinary skill in the art to modify the teaching of Finn et al. by incorporating the system with audio feedback from a region being monitored in which the processing at the common site includes visually presenting processing results for the purpose of better understanding the on-going, developing, fire-condition where individuals in need of rescue may be found.

Re claim 16, a method as in claim 14 where the sensed speech intelligibility test signals receive initial processing prior to being coupled to the common site ("*fig.10-the initial process at (570-576) prior to couple to common site at (578)*").

Re claim 17, have been analyzed and rejected with respect to claim 16 above.

Re claim 18, Finn et al. discloses an apparatus comprising: a microphone coupled to the control circuits("*fig.10/508-556; page 10 [0074] line 1-2*"), the control circuits establishing an intelligibility index in response to signals from the microphone ("*fig.10/(570-576); page 10[0075]*"). However, Finn et al. fail to disclose the apparatus comprising at least control circuit with couple to the one ambient condition sensor. But, Faltesek et al. disclose a system in which include control cuircuit couple to the at least one ambient condition sensor ("*fig.1/(16,29)*") for the purpose of feeding fire sounds as well as temperature information to a displaced site for processing. Thus, taking the combined teaching of Finn et al. and Faltesek et al. as a whole, it would have been obvious for one of the ordinary skill in the art to modify Faltesek et al. by incorporating the system in which include at least one ambient condition sensor for the purpose of feeding fire sounds as well as temperature information to a displaced site for processing.

Re claim 19, an apparatus as in claim 18, which provides at least one port for connection of external microphones(" *Finn,fig.10-all microphones are connected via port/medium heading to switch (578)*").

Re claim 20, an apparatus as in claim 18, however the recently combined teaching of the combined teaching of Finn et al. and Faltesek et al. as a whole, fail to teach of the network communications port. But, Faltesek disclose a system with a network communication port ("*fig.2/ port to provide communication with (32 and 34)*") for the purpose of coupling the processing circuitry to the output device for interface. Thus, taking the now modified teaching of Finn et al. and Faltesek et al. as a whole, it would have been obvious for one skill in the art to have the network communications port for the purpose of coupling the processing circuitry to the output device for interface.

Re claim 22, an apparatus as in claim 18 where the ambient condition sensor comprises at least one of a smoke sensor, a flame sensor, a thermal sensor or a gas sensor ("*Faltesek, fig.1/(20)*").

Re claim 23, has been analyzed and rejected with respect to claim 9.

Re claim 24, an apparatus as in claim 23 which includes a network communications port, the port facilitating coupling electrical energy

to at least the control circuits, and coupling intelligibility indices at least from the control circuits to a medium (fig.1-2; page 1[0004] line 10-16/speech signals to be transferred zone to zone).

Re claim 25, an apparatus as in claim 24 where the communications port includes an interface for carrying out bi-directional communication via a medium ("*Faltesek, fig.2-bi-directional (32,34)*").

Re claim 27, an apparatus comprising: a microphone with an electrical output corresponding to incident audio ("*fig.10/508-incident audio to sense by mics*"); control circuits coupled to the microphone ("*fig.10/(580,570.578)*"), the control circuits implement intelligibility processing in connection with incident audio ("*fig.10/570;page 10[0075]*"); however, Finn et al., fail to teach of the network communications port. But, Faltesek disclose a system with a network communication port ("*fig.2/ port to provide communication with (32 and 34)*") for the purpose of coupling the processing circuitry to the output device for interface. Thus, taking the modified teaching of Finn et al. and Faltesek et al. as a whole, it would have been obvious for one skill in the art to modify the teaching of Finn et al. by incorporating the network communications port for the purpose of coupling the processing circuitry to the output device for interface.

Re claim 28, an apparatus as in claim 27, however, the recently modified teaching of Finn et al. and Faltesek et al. as a whole, fail to disclose the housing attachable to a mounting surface. However, and Faltesek et al. discloses a system with housing attachable to a mounting surface ("fig.1/18, page 2[0037] line 7-8-where each housing may be place/attached at regions in (fig.2/R)") for the purpose of insuring that the entire region is accessible to outputs from one or more speakers. Thus, taking the combined teaching of Finn et al. and Faltesek et al. as a whole, it would have been obvious for one of ordinary skill In the art to modify the former teaching of Finn et al. and Faltesek et al. as a whole, by incorporating the housing attachable to a mounting surface for the purpose of insuring that the entire region is accessible to outputs from one or more speakers.

7. Claims 32,35-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Kimura et al. (US 2003/0128850 A1).

Re claim 32, Kimura et al. disclose of a system (fig.1) comprising: control circuits for producing electrical representations of speech intelligibility test signals (fig.1 (331,1) broadcast signals to be generated; page 2[0026]); at least one audible output device coupled to the control circuits to audibly emit the speech

intelligibility test signals (fig.1 (1)) and a plurality of spaced apart acoustic sensors (fig.1/3,381); and circuits coupled to the respective acoustic sensors including circuitry for evaluating intelligibility of audio received by the respective acoustic sensors and generating an indicator of intelligibility on a per acoustic sensor basis (page 3[0032]fig.1 (5a-d),; page 2[0028]; and further page 4[0039]].

Re claim 35, a system as in claim 32, which include a plurality of audio output devices coupled to the control circuits (fig.1 (1))

Re claim 36, a system as in claim 32, which include a plurality of ambient detectors ((fig.1 (381)).

Re claim 37, a system as in claim 36, where at least some of the detectors carry respective one of acoustic sensors ((fig.1 (1a-d) (5a-5d);).

Re claim 38, a system as in claim 32 where the control circuits include executable instructions for producing speech intelligibility test signals to be audibly output by the at least one of the audio output device (page 2[0022,0026-28] fig.1(381,3) broadcast automatically based on detecting).

Re claim 39, the system as in claim 38, but kimura is silent in regard to the include additional executable instructions for processing the speech intelligibility test signals received from the respective sensors. But, Kimura did disclose of the analyzing the receive signals received from the sensor including volume and dianostic (page 2[0027, 0032] & page 4[0039]), with the disclose information it is inherent of the existence of additional executable instructions for processing the speech intelligibility test signals received from the respective sensors.

7. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Finn et al.("US 2002/0141601 A1") and further in view of Faltesek et al.("US 2005/0105743 A1") and further in view of official Notice.

Re claim 26, An apparatus as in claim 25, however, the combined teaching of combined teaching of Finn et al. and Faltesek et al. as a whole, fail to teach of the interface includes circuits coupled to at least one of an electrical cable or an optical cable. However, Official Notice is taken that this limitation is commonly known in the art, thus it would have been obvious for one ordinary skill in the art to have the interface includes circuits coupled to at least one of an

electrical cable or an optical cable for purpose of transmitting user input signals to the output speakers.

7. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Finn et al.("US 2002/0141601 A1") and further in view of Faltesek et al.("US 2005/0105743 A1") and further in view of Kenneth Dylan Jacob ("US 2002/009551 A1"),

Re claim 21, an apparatus as in claim 20, however, the combined teaching of Finn et al and Faltesek et al. as a whole, fail to teach the intelligibility index comprises at least one of STI, RASTI, SII, or, a subset of one of STI, RASTI, SII. But Jacob discloses an audio spectrum analyzer in which the intelligibility index comprises at least one of STI, RASTI, SII, or, a subset of one of STI, RASTI, SII. ("*page 1[0005-0007]*") for the purpose of measuring the speech intelligibility of sound signals. Thus, taking the combined teaching of Finn et al and Faltesek et al. and now Jacob as a whole, it would have been obvious for one of ordinary skill in the art to modify the teaching of Finn et al. and Faltesek et al. as a whole, by incorporating the intelligibility index comprises at least one of STI, RASTI, SII, or, a subset of one of STI, RASTI, SII for the purpose of measuring the speech intelligibility of sound signals.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Disler Paul whose telephone number is 571-270-1187. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DP

XU MEI
PRIMARY EXAMINER